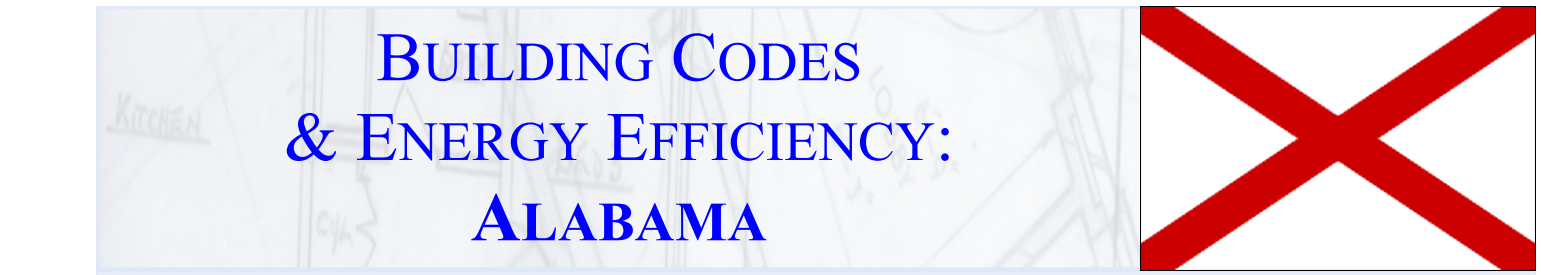
BUILDING CODES & ENERGY EFFICIENCY: ALABAMA



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Buildings account for almost 40 percent of the total energy use in the United States and 70 percent of our electricity use, representing a significant opportunity for energy savings. New construction is the most cost-effective point in the life of a building to establish minimum energy efficiency elements. Building energy codes serve as a logical starting point for comprehensive modern policies to reduce energy dependence and extend our natural resources. For the state of Alabama, this first step should be the adoption of the U.S. model energy codes, the **International Energy Conservation Code (IECC) and ASHRAE Standard 90.1**.

In February 2009, the American Recovery and Reinvestment Act (ARRA) — the federal stimulus legislation appropriating funds for a variety of state initiatives — allocated $3.1 billion for the U.S. Department of Energy's State Energy Program (SEP) to assist states with building energy efficiency efforts. As one of the requirements to receive these SEP grants, state governors **must certify to DOE** that their state (or applicable units of local government that authorize building codes) will implement energy codes of equal or greater stringency than the latest national model codes (currently, the 2009 edition of the IECC and Standard 90.1-2007).

Given this unprecedented opportunity to receive federal aid for building energy efficiency, it is in the state's best economic interest to **adopt the 2009 IECC and Standard 90.1-2007 statewide** begin enjoying the benefits of an efficient building sector.

CONSUMER BENEFITS

- Alabama consumers will save money well into the future by reducing utility bills, minimizing the negative impacts of fluctuations in energy supply and cost, and conserving available energy resources. Retail and office buildings constructed to meet the requirements of the IECC can be **30-40 percent more energy efficient** than typical buildings not constructed to meet the energy code.

- Monetary savings derived from codes increase consumer purchasing power, ultimately helping to **expand the Alabama economy.**

BUILDING COMMUNITY BENEFITS

- The national model code, the 2009 IECC, offers flexibility to Alabama builders and design professionals, allowing them to **optimize the cost-effectiveness** of energy efficient features in their building products, and to satisfy the variety of consumer preferences.

- A uniform building energy code across the state's 28 counties and more than 100 towns and cities provides **consistency for the construction sector** and enables local jurisdictions to pool limited resources and combine personnel to form regional enforcement and educational programs.

UTILITY AND ENVIRONMENTAL BENEFITS

- An energy code improves the energy performance of all new buildings and reduces demand on power generators, therefore **improving the air quality** of local communities throughout the state.

- Electricity use is one of the leading generators of air pollution. Rising power demand increases emissions of sulfur dioxide, nitrous oxides and carbon dioxide. Energy codes have proven to be **one of the most cost-effective means to address air pollution** and other environmental impacts.

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A Model State Energy Code for Alabama

Alabama has an outdated voluntary energy code for all buildings other than state government facilities. Because the state code is voluntary, only a handful of local jurisdictions have adopted it.

Why Update the Alabama Energy Code?

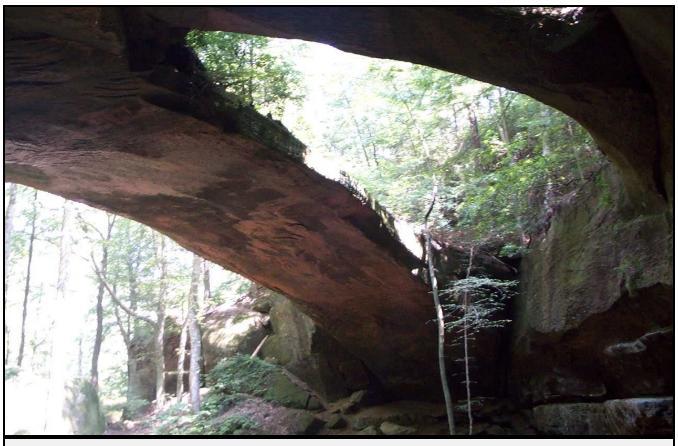
- When states regularly update and enforce their energy codes, residents enjoy the benefits of increased comfort in their homes and savings in their utility bills.
- With increased awareness of national energy security issues and projections of sharp energy cost increases, state government can demonstrate leadership by meeting national standards.
- The Alabama State Legislature has not addressed energy codes for buildings (other than state facilities) since 1995. We now have an opportunity to take steps that will establish minimum energy performance standards for new commercial and residential buildings and, in the process, provide strategic options for better management of our energy supplies.

Energy Supplies

Alabama produces large amounts of coal and also relies on coal imports from other states to meet roughly half of its demand. Due to high demand from the industrial and residential sectors, Alabama's total electricity consumption is high when compared to other states. Nevertheless, Alabama ultimately produces more electricity than it uses and exports that surplus to neighboring states. The question is: could we do better? If energy codes were mandated, electricity demand would fall within the State, providing excess supply for export.

Household Prosperity

In 2007, Alabama ranked 43rd in per capita personal income, but was the 7th highest user of total energy per capita. Alabama's per capita consumption of residential electricity is one of the highest in the country due to high air-conditioning demand during hot summer months and the widespread use of electricity for home heating during generally mild winter months. This has a significant impact in terms of household finances. During months of high home energy use in other states, low income residents spend 25-30% of their monthly household income on heating and cooling costs.



The Natural Bridge in Winston County, Alabama—the longest natural bridge east of the Rocky Mountains.

An Untapped Resource

Alabama has enjoyed rich reserves of natural gas, the largest hydroelectric power infrastructures east of the Rocky Mountains, and has nuclear facilities from which it also draws power. The potential supply available through energy efficiency of buildings, however, provides a significant untapped resource that can be made available through energy codes. Energy prices are projected to rise exponentially over the next decade. The state of Alabama can bring down energy costs for its residents and businesses by ensuring that buildings meet basic energy performance standards through their design and construction. In the process, Alabama can reduce electricity demand within its borders and ultimately export larger quantities to other states in the region. Wise management of Alabama's energy resources indicates that the state should seize the low-hanging fruit that building energy codes offer.

***For more information visit* www.bcap-energy.org**

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